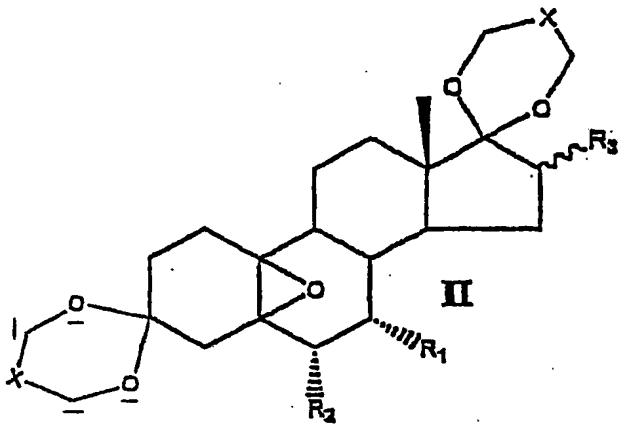
AMENDMENTS TO THE CLAIMS

1. (Currently amended) Compounds of formula (II):

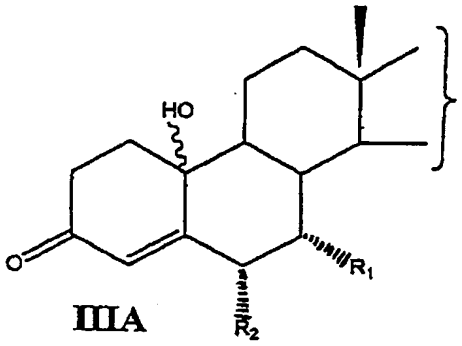


where X is selected from nothing, $C(CH_3)_2$, and CH_2; R_1 is selected from CH_3, H, and $COOCH_3$; R_2 is selected from CH_3, F, and H; and R_3 is selected from CH_3, OH, F, and H.

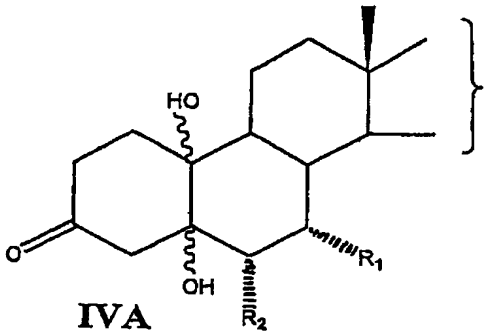
2. (Original) Compound of claim 1 where X = $C(CH_3)_2$ and R_1 = CH_3, R_2 = R_3 = H.

Claims 3-7 (Canceled)

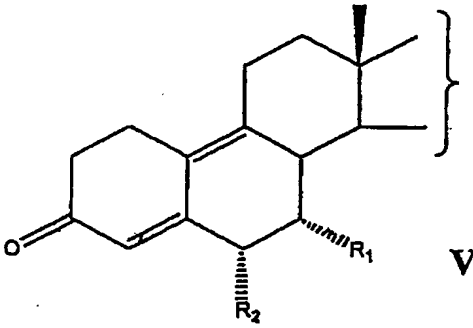
8. (Original) A process for preparation of a steroid having the 4,9(10)-diene-3-one structure, and derivatives thereof, having the formula (VA), which comprises contacting a steroid selected from the group consisting of 10-hydroxy-4-ene-3-ketosteroids (IIIA), 5,10-dihydroxy-3-ketosteroids (IVA), and mixtures of (IIIA) and (IVA), with concentrated sulfuric acid or moderated sulfuric acid, the moderated sulfuric acid comprising a mixture of the concentrated sulfuric acid and water in an amount of up to 5% by volume of the moderated acid, or a mixture of the concentrated sulfuric acid and a second acid in an amount of up to 30% by volume of the moderated acid,



IIIA



IVA



VA

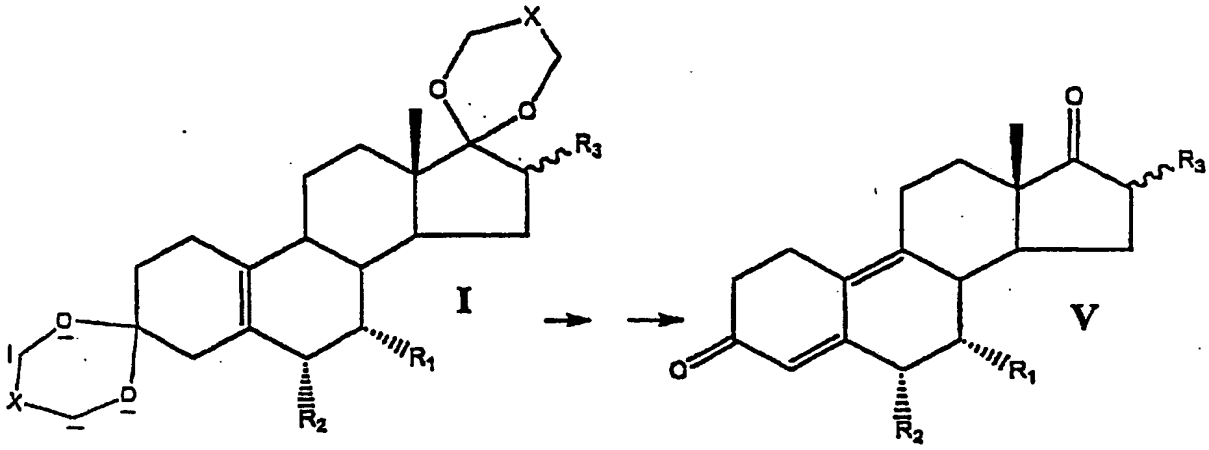
where R_1 is selected from CH_3, H, and $COOCH_3$; and R_2 is selected from CH_3, F, and H.

9. (Original) A process according to claim 8 where estra-4,9(10)-diene-3,17-dione (VA) is prepared from a steroid selected from the group consisting of 10-hydroxy-estra-4-ene-3,17-dione (IIIA), 5,10-dihydroxy-estra-3,17-dione (IVA), and mixtures thereof.

10. (Original) A process according to claim 8 where 7α-methyl-estra-4,9(10)-diene-3,17-dione (VA) is prepared from a steroid selected from the group consisting of 10-hydroxy-7α-methyl-estra-4-ene-3,17-dione (IIIA), 5,10-dihydroxy-estra-3,17-dione (IVA), and mixtures thereof.

11. (Original) A process according to claim 8 where the steroid is contacted with the concentrated sulfuric acid.

12. (Currently amended) A process for preparation of steroidal estra-4,9(10)-diene-3,17-diones of structure (V):



where X is selected from nothing, $C(CH_3)_2$, and CH_2; R_1 is selected from CH_3, H, and $COOCH_3$; R_2 is selected from CH_3, F, and H; and R_3 is selected from CH_3, OH, F, and H; where the process comprises:

(a) contacting estra-5(10)-ene-3,17-dione-3,17-bis-ketal (I) with an epoxidizing agent;

(b) contacting the epoxide product of step (a) with dilute acid;and

(c) contacting the product of step (b) with concentrated sulfuric acid or moderated sulfuric acid, the moderated sulfuric acid comprising a mixture of the concentrated sulfuric acid and water in an amount of up to 5% by volume of the moderated acid, or a mixture of the concentrated sulfuric acid and a second acid in an amount of up to 30% by volume of the moderated acid.

13. (Original) A process according to claim 12 where 7α-methyl-estra-4,9(10)-diene-3,17-dione (V) is prepared from a steroid selected from the group consisting of 7α-methyl-estra-5(10)-ene-3,17-dione-3,17-bis-ethylene glycol ketal (I), 7α-methyl-estra-5(10)-ene-3,17-dione-3,17-bis-neopentyl glycolketal (I).

14. (Original) A process according to claim 12 where the epoxidizing agent is m-chloroperbenzoic acid or peracetic acid.

15. (Original) A process according to claim 12 where the product of step (b) is contacted with the concentrated sulfuric acid.

16. (Original) A process according to claim 12 where the product of step (b) is contacted with the moderated sulfuric acid, and where the moderated sulfuric acid comprises a mixture of the concentrated sulfuric acid and concentrated phosphoric acid.

17. (Original) A process according to claim 12 where estra-4,9(10)-diene-3,17-dione (V) is prepared from a steroid selected from the group consisting of estra-5(10)-ene-3,17-dione-3,17-bis-ethylene glycol ketal (I), estra-5(10)-ene-3,17-dione-3,17-bis-neopentyl glycolketal (I).

18. (Original) A process for preparation of steroidal estra-4,9(10)-diene-3,17-diones of structure (V) by treatment of steroidal estra-5(10),9(11)-diene-3,17-diones of structure (VI) with concentrated mineral acid.

19. (Original) A process according to claim 18 where the mineral acid is concentrated phosphoric acid.